

Chapter 12: Email on UNIX

This chapter discusses email forwarding, the IMAP mail protocol at Fermilab, and UNIX email clients.

12.1 Getting Started

Information about email at Fermilab is collected at the web site *E-mail at Fermilab*, at <http://computing.fnal.gov/email/>. You can read about the Fermilab Mail Gateway Server and the IMAP distributed mail technology implemented at Fermilab. We encourage you to use IMAP.

To get started using email, first request an IMAP server account. Go to the *Request Form for Computing Username and Primary Accounts* at http://www.fnal.gov/cd/forms/acctreq_form.html.

Once you have your IMAP account:

- Go to <http://computing.fnal.gov/email/servers/passwd.html> to set your password and your mail forwarding on the Mail Gateway Server. The incoming server should be set to `imapserver<n>.fnal.gov`, where `<n>` is 1, 2 or 3, according to the server on which you have your account. The outgoing server should be set to `smtp.fnal.gov`.
- Go to <http://computing.fnal.gov/email/servers/imap/>, choose the server on which you have your account, and follow the directions to reset your IMAP server password and change other IMAP account information as you wish.

Now you have to choose an email client for reading and writing email messages from your local machine.

If you choose a non-IMAP email client (and only in this case), you'll need to set your forwarding address to your account on the machine on which you run the client. Your forwarding address will be of the form `<username>@<node>.fnal.gov` or `<username>@<node.domain>`.

12.2 IMAP-Supported UNIX Email Clients

12.2.1 Pine

pine (Program for Internet News and Email) is a menu-driven, non-graphic UNIX mail system. It can be configured to be compatible with IMAP. See <http://computing.fnal.gov/email/smtp-server/unix-clients.html#pine>.

12.2.2 Netscape Messenger

To configure Netscape Messenger to work with IMAP, see the instructions at <http://computing.fnal.gov/email/smtp-server/unix-clients.html#netscape>.

12.2.3 Mozilla Mail & Newsgroups

We don't yet have documentation on the CD email web site for configuring Mozilla for IMAP, but it's easy to follow the Mozilla account setup wizard. From the Mozilla main page, select **WINDOWS > MAIL & NEWSGROUPS**, select **EMAIL ACCOUNT**, and enter account information as prompted. In particular, the incoming server must be set to `imapserver<n>.fnal.gov` where `<n>` is 1, 2 or 3, and the outgoing set to `smtp.fnal.gov`.

12.2.4 WebMail

The IMAP servers also support SSL-encrypted web-based access to email. This is available at <https://imapserver<n>.fnal.gov> (note the `s` in `https`!) where `<n>` is 1, 2, or 3, according to the IMAP server containing your mail. See <http://computing.fnal.gov/email/servers/webmail-ssl.html> for more information.

12.3 Configuring Pine

Since **pine**'s functionality is well documented elsewhere on the web, this section provides only some start-up information.

12.3.1 Multiple Mail Formats

The pine mail reader is able to read and write email messages from and to a variety of email formats and locations. The formats include:

- native pine
- standard Unix
- mh and exmh folders
- netscape mail folders
- imapserver

There are three pine parameters that need to be set in order for pine to recognize non-native email folders. You can make these adjustments through the pine Setup option, but it is generally easier to do so by editing the `.pinerc` configuration file.

The three parameters are:

- `folder-collections` This identifies all the mail formats that pine will be required to recognize and process.
- `inbox-path` This sets the primary inbox corresponding to the user's chosen primary mail format (an inbox is a folder into which incoming mail messages are placed)
- `incoming-folders` This sets secondary inboxes for the corresponding secondary mail formats; all mail formats identified in `folder-collections` must have an inbox defined here, except the primary.

As an example, we'll show a portion of a user's `.pinerc` file with settings for these three parameters such that:

- The user wants pine to recognize and process mail in the formats: Fermilab `imapserver1`, `mh`, native pine, netscape, and his ISP's `imapserver`.
- The user sets his Fermilab `imapserver1` account inbox as his primary location for incoming mail; all the others are secondary.

The portion of the `.pinerc` file that defines these parameters is as follows (note where the commas appear; the exclamation points begin comment text):

```
folder-collections="Imapserver1" {imapserver1.fnal.gov} [],
    ! imapserver1 mail folders
"mh/exmh" #mh/[],
    ! local #mh/exmh folders
"pine" mail/[],
    ! local native pine folders
"Netscape" nsmail/[]
    ! local native Netscape folders

inbox-path={imapserver1.fnal.gov}inbox ! primary inbox
```

```
incoming-folders=#mh/inbox, ! mh/exmh
mail/Inbox, ! pine
nsmail/Inbox, ! Netscape
{mail.mc.net}inbox ! offsite imapserver
```

12.3.2 Further Configuration

Go to **pine**'s SETUP CONFIGURATION menu. There are many options available, and they come with on-line help. With the cursor on the option you want, press **?** to get help on it. Some options are variables which take one or more values. To set a value for one of these variables, first type **A** to add, then enter the value. Or type **C** to change an existing value. Other options are in the form of a list of features that you can turn on or off individually. Enter **X** to enable a feature; leave unwanted features blank. Here we provide some recommendations (not including those discussed in section 12.3.1

Multiple Mail Formats):

default-fcc	The default folder for messages you send out; make sure it is <i>not</i> set to (uppercase) INBOX. Default is sent-mail.
read-message-folder	The folder in which read messages are placed. Make sure it is set, and that it is <i>not</i> set to (uppercase) INBOX.
user-domain=fnal.gov	This value specifies the domain part (right-hand side) of your return address on outgoing email, thus setting your “reply to” address to {username}@fnal.gov. This value is also used as the default domain for email that you send to a local username.
reply-always-uses-reply-to	Set this option so that pine uses the “reply to” field, if present, when you reply to incoming messages.

The option list is rather lengthy, so we provide some further suggestions for you. We have found the following features to be particularly useful.

Explanations for them are in the on-line help:

```
auto-move-read-msgs
auto-zoom-after-select
auto-unzoom-after-apply
customized-hdrs
default-composer-hdrs
enable-aggregate-command-set
enable-alternate-editor-cmd
```

```
enable-bounce-cmd
enable-flag-command
enable-full-headers-command
enable-jump-command
enable-suspend
enable-unix-pipe-cmd
enable-expanded-view-of-addressbooks
preserve-start-stop-characters
quell-user-lookup-in-passwd-file
```

12.3.3 Printing in Pine

You will find it useful to set up printing from **pine**.

- 1) Go to **pine**'s SETUP PRINTER screen (enter **S** followed by **P**).
- 2) Move down to the `Personally selected print command` option. Enter **S** to select this option.
- 3) Enter **A** to add a printer, then as prompted, enter the name of the printer (this name is for your reference only) and the full command for the printer. For example:
- 4) Printer: `<printer_name>`
- 5) Command: `flpr -q<printer_name>`
- 6) You may enter several printers. Enter **S** to select the printer you want to use.
- 7) Exit (**E**) and save changes.

12.4 Non-IMAP Mail Forwarding

12.4.1 Choose a Node and Create a `.forward` File

If you forego the use of IMAP, you will need to choose one node, whether it's part of a cluster or not, for your mail activities. Once you do, forwarding mail to that particular node requires creating a simple `.forward` file in your `$HOME` directory on that node.

Using your preferred editor, enter the following expression as the contents of this file:

```
\<username>@<node>.fnal.gov
```

For example, user “fred” who wants to receive mail on the FSUI02 node of the FNALU cluster would log into FSUI02, create the file and enter as contents the line:

```
\fred@fsui02.fnal.gov
```

This expression is an instruction to put incoming messages in this designated node’s spool area. The initial backslash (\) is required to prevent looping.

12.4.2 Why Choose a Particular Node?

You might wonder why you need to choose a particular node in the case of a file-sharing cluster. The reason is that incoming mail on UNIX is sent to a non-shared area of *one* node; you can’t change that, you can only specify *which* node you want used. From here the mail needs to be incorporated into the mail system of your choice. If you are working on a different node from the one receiving the incoming mail, you will be able to send mail, but you will only see previously incorporated mail; you will not receive (and cannot incorporate) new mail because it is inaccessible to this node.

12.4.3 Set Forwarding on Other Nodes

In principle, you should not be receiving mail on any node except your chosen one. The email address to which your correspondants send mail should always be `<username>@fnal.gov` so that your mail comes in through the Fermilab gateway and gets forwarded as set there.

If you receive some mail on a separate UNIX node or file-sharing system (external to the cluster containing your chosen email node), you can forward it back to the gateway to be deposited on your chosen node. To do so, create a `.forward` file in your `$HOME` directory on the separate node. The contents of this file should be a single line containing the expression:

```
<username>@fnal.gov
```

This is your Fermilab gateway email address. Note that there is no initial backslash.

12.4.4 Set your “Reply To” Address

In most mail handlers, when a user directly “replies” to a message that you have sent (as opposed to starting a new message in the normal fashion to send to you), the reply is sent by default to the address from which you sent the original message, i.e., to the address in the “from” field. At Fermilab we encourage having all messages, including replies, addressed to `<username>@fnal.gov` so that they traverse the gateway. In order to

accomplish this, the outgoing message must specify a “reply to” address, and the mail handler that receives the message should be configured to send replies to that address in preference to the “from” address.

For **pine**, you need to set some configuration parameters. We describe this under **Configuring pine** in section 12.3.2 *Further Configuration*.

